



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,039	02/05/2002	Oliver Schreck	P02,0018	3794

26574 7590 03/23/2005

SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 SEARS TOWER
CHICAGO, IL 60606-6473

EXAMINER

ROY, BAISAKHI

ART UNIT	PAPER NUMBER
----------	--------------

3737

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

501

Office Action Summary	Application No.		Applicant(s)	
	10/072,039		SCHRECK, OLIVER	
	Examiner		Art Unit	
	Baisakhi Roy		3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Jesmanowicz et al. (5603322).

Regarding claims 1, 2, 4-6, 7, 14, and 15, Jesmanowicz et al. disclose a method and apparatus for functional MRI including obtaining and storing a plurality of images with and without stimulation together with information indicating whether the image was registered with or without stimulation and with at least one image related stimulation value such as the type of stimulation and information describing a point in time of said stimulation (col. 2 lines 41-67, col. 10 lines 45-60). Jesmanowicz et al. further teach determining an "image-related correlation values" or images wherein points of highest intensity correspond to points of highest correlation or coincidence to better differentiate between activated and non-activated brain regions (col. 3 lines 6-18, col. 6 lines 23-38 and claim 1). The reference further teaches filtering out some images that should be ignored during the evaluation (col. 3 lines 51-66).

Regarding claims 3, 9, 12, and 13, Jesmanowicz et al. further teach triggering a neural activity by a stimulus or sensory stimulator which could be in the form of optical

Art Unit: 3737

stimulation and a stimulation source to measure the pulse intensity of an electrical pulse (col. 10 lines 45-60).

Regarding claim 8, Jesmanowicz et al. teach obtaining information describing the intensity level of the applied stimulus (col. 2 lines 57-60).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jesmanowicz et al in view of Apkarian et al. (6018675). Jesmanowicz et al. teach a functional MRI method and apparatus for obtaining images with and without stimulation as set forth above, but do not explicitly teach the use of a pressure-exerting stimulus. In the same field of endeavor, Apkarian et al. disclose a pain measurement system based on comparative functional magnetic resonance imaging (MRI) of the brain of a subject. In the disclosed system, measurements quantifying a subject's pain level are made by comparing images of the subject's brain when the subject is in pain with the corresponding brain images made when the subject is not in pain (abstract, col. 2 lines 43-53). It would have therefore been obvious to one of ordinary skill in the art to use the pressure-exerting stimulation source teaching by Apkarian et al. to modify the teaching by Jesmanowicz et al. for the purpose of imaging a subject's response to pain or pressure.

Art Unit: 3737

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jesmanowicz et al. in view Kassai et al. (5771893). Jesmanowicz et al. as set forth above, teach a functional MRI method and apparatus for obtaining images with and without stimulation but do not explicitly teach the use of an acoustic stimulus. In the same field of endeavor, Kassai et al. disclose a method and apparatus of obtaining functional images with and without stimulation (abstract) with said stimulation being an acoustic stimulation (col. 12 lines 39-45). It would have therefore been obvious to one of ordinary skill in the art to use the acoustic stimulation teaching by Kassai et al. to modify the teaching by Jesmanowicz et al. for the purpose of obtaining images of a subject's response to an acoustic stimulation.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 for relevant references of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3737

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.R.

BR


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700